

Chapter 62-297
Stationary Sources - Emissions Monitoring

62-297.100 Purpose and Scope.

The Department of Environmental Protection adopts this chapter to establish test procedures that shall be used to determine the compliance of air pollutant emissions units with emission limiting standards specified in or established pursuant to any of the stationary source rules of the Department. Words and phrases used in this chapter, unless clearly indicated otherwise, are defined at Rule 62-210.200, F.A.C.

History: Formerly 17-2.700(1)(a); Formerly 17-297.100; Amended 11-23-94, 3-13-96.

62-297.100

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94
1 st Revision	11/23/94	12/21/94	06/16/99	64 FR 32346	08/16/99
2 nd Revision	03/13/96	04/15/96	06/16/99	64 FR 32346	08/16/99

62-297.310 General Compliance Test Requirements.

The focal point of a compliance test is the stack or duct which vents process and/or combustion gases and air pollutants from an emissions unit into the ambient air.

- (1) **Required Number of Test Runs.** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time Periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the source's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20% below the allowable emission limiting standards.
- (2) **Operating Rate During Testing.** Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity as defined below. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
 - (a) Combustion Turbines. (Reserved)
 - (b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.
- (3) **Calculation of Emission Rate.** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
- (4) **Applicable Test Procedures.**
 - (a) **Required Sampling Time.**
 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or

agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%

3. Check after
each test series

Comparison check

5%

(5) Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

(6) Required Stack Sampling Facilities. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- (a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- (b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- (c) Sampling Ports.
 - 1. All sampling ports shall have a minimum inside diameter of 3 inches.
 - 2. The ports shall be capable of being sealed when not in use.
 - 3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - 5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
- (d) Work Platforms.
 - 1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
 - 2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
 - 3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- (e) Access to Work Platform.
 1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
 2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.
- (f) Electrical Power.
 1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
 2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- (g) Sampling Equipment Support.
 1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
 2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.
 3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.
- (7) Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - (a) General Compliance Testing.
 1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
 4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
 6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
 7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.
- (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than

the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

(8) Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.
 - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 - 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 - 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
 - 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
 - 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department

or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

(9) The terms stack and duct are used interchangeably in this rule.

History: Formerly 17-2.700(1)(b); Formerly 17-297.310; Amended 11-23-94, 3-13-96.

62-297.310

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2 nd Revision	03/13/96	04/15/96	06/16/99	64 FR 32346	08/16/99

62-297.400 EPA Methods Adopted by Reference.

- (1) The EPA Test Methods that are adopted by reference in Rule 62-297.401, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For the purposes of this section such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.
- (2) Cross references within Rules 62-297.411 through 62-297.424, F.A.C., DEP Test Methods, to the unmodified sections of the EPA test methods refer to the EPA test method number and Section number (e.g., EPA Method 7, Section 3.2.). For emissions units not subject to Rule 62-296.800, F.A.C., (Standards of Performance for New Stationary Sources) or 62-296.810 (Emissions Standards for Hazardous Air Pollutants) and which have submitted a complete application for a permit to construct prior to December 1, 1980, DER methods 1, 2, and 3 may be substituted for EPA methods 1, 2, and 3 when any EPA test method (4 thru 20) is specified for the test procedure except as noted in the applicable rule.

History: Formerly 17-2.700(1)(c), Formerly 17-297.400, Amended 11-23-94, Repealed 1-1-96.

62-297.400

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62-297.401 Compliance Test Methods.

This rule adopts the test methods to be used where a compliance test is required by Department air pollution rule or air permit. The EPA test methods and quality assurance procedures listed in this rule and contained in 40 CFR Part 51, Appendix M, 40 CFR Part 60, Appendix A and F, 40 CFR Part 61, Appendix B and C, and 40 CFR Part 63, Appendix A, are adopted and incorporated by reference in Rule 62-204.800 F.A.C. The EPA test methods that are adopted by reference in Rule 62-204.800, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For purposes of this rule, such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.

- (1)
 - (a) EPA Method 1 -- Sample and Velocity Traverses for Stationary sources -- 40 CFR 60 Appendix A.
 - (b) EPA Method 1A -- Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts -- 40 CFR 60 Appendix A.
- (2) EPA Method 2 -- Determination of Stack Gas Velocity and Volumetric Flow Rate -- 40 CFR 60 Appendix A.
 - (a) EPA Method 2A -- Direct Measurement of Gas Volume Through Pipes and Small Ducts -- 40 CFR 60 Appendix A
 - (b) EPA Method 2B -- Determination of Exhaust Gas Volume Flow Rate from Gasoline Vapor Incinerators -- 40 CFR 60 Appendix A.
 - (c) EPA Method 2C -- Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks and Ducts (Standard Pitot Tube) -- 40 CFR 60 Appendix A
 - (d) EPA Method 2D -- Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts -- 40 CFR 60 Appendix A
- (3) EPA Method 3 -- Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight -- 40 CFR 60 Appendix A.
 - (a) EPA Method 3A -- Determination of Oxygen and Carbon Dioxide Concentrations in Emission From Stationary Sources (Instrumental Analyzer Procedure) -- 40 CFR 60 Appendix A.
 - (b) (Reserved).
- (4) EPA Method 4 -- Determination of Moisture Content in Stack Gases -- 40 CFR 60 Appendix A.
- (5) EPA Method 5 -- Determination of Particulate Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
 - (a) EPA Method 5A -- Determination of Particulate Emissions from the Asphalt Processing and Asphalt Roofing Industry -- 40 CFR 60 Appendix A.
 - (b) EPA Method 5B -- Determination of Nonsulfuric Acid Particulate Matter from Stationary Sources -- 40 CFR 60 Appendix A.
 - (c) (Reserved).
 - (d) EPA Method 5D -- Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters -- 40 CFR 60 Appendix A.
 - (e) EPA Method 5E -- Determination of Particulate Emissions from the Wool Fiberglass Insulation Manufacturing Industry -- 40 CFR 60 Appendix A.
 - (f) EPA Method 5F -- Determination of Nonsulfate Particulate Matter from Stationary Sources -- 40 CFR 60 Appendix A.
 - (g) EPA Method 5G -- Determination of Particulate Emissions from Wood Heaters from a Dilution Tunnel Sampling Location -- 40 CFR 60 Appendix A
 - (h) EPA Method 5H -- Determination of Particulate Emissions from Wood Heaters from a Stack Location -- 40 CFR 60 Appendix A
- (6) EPA Method 6 -- Determination of Sulfur Dioxide Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
 - (a) EPA Method 6A -- Determination of Sulfur Dioxide, Moisture, and Carbon Dioxide Emissions From Fossil Fuel Combustion Sources -- 40 CFR 60 Appendix A.
 - (b) EPA Method 6B -- Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources -- 40 CFR 60 Appendix A.
 - (c) EPA Method 6C -- Determination of Sulfur Dioxide Emissions from Stationary Sources

- (Instrumental Analyzer Procedure) -- 40 CFR 60 Appendix A.
- (7) EPA Method 7 -- Determination of Nitrogen Oxide Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
- (a) EPA Method 7A -- Determination of Nitrogen Oxide Emissions from Stationary Sources -- Ion Chromatographic Method -- 40 CFR 60 Appendix A.
- (b) EPA Method 7B -- Determination of Nitrogen Oxide Emissions from Stationary Sources (Ultraviolet Spectrophotometry) -- 40 CFR 60 Appendix A.
- (c) EPA Method 7C -- Determination of Nitrogen Oxide Emissions from Stationary Sources - Alkaline-Permanganate/ - Colorimetric Method -- 40 CFR 60 Appendix A.
- (d) EPA Method 7D -- Determination of Nitrogen Oxide Emissions from Stationary Sources - Alkaline-Permanganate/ - Ion Chromatographic Method -- 40 CFR 60 Appendix A.
- (e) EPA Method 7E -- Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure) -- 40 CFR 60 Appendix A.
- (8) EPA Method 8 -- Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
- (9) (a) EPA Method 9 -- Visual Determination of the Opacity of Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
- (b) Alternate Method 1 -- Determination of the Opacity of Emissions from Stationary Sources Remotely by Lidar -- 40 CFR 60 Appendix A.
- (c) DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
 2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
 - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
 - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
- (10) EPA Method 10 -- Determination of Carbon Monoxide Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
- (a) EPA Method 10A -- Determination of Carbon Monoxide Emissions in Certifying Continuous Emissions Monitoring Systems at Petroleum Refineries -- 40 CFR 60 Appendix A.
- (b) EPA Method 10B -- Determination of Carbon Monoxide Emissions from Stationary Sources -- 40 CFR 60 Appendix A.

- (11) EPA Method 11 -- Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries -- 40 CFR 60 Appendix A.
- (12) EPA Method 12 -- Determination of Inorganic Lead Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
- (13) EPA Methods 13A and 13B.
 - (a) EPA Method 13 A -- Determination of Total Fluoride Emissions from Stationary Sources -- SPADNS --- Zirconium Lake Method -- 40 CFR 60 Appendix A.
 - (b) EPA Method 13 B -- Determination of Total Fluoride Emissions from Stationary Sources -- Specific Ion Electrode Method -- 40 CFR 60 Appendix A.
- (14) EPA Method 14 -- Determination of Fluoride Emissions from Potroom Roof Monitors of Primary Aluminum Plants -- 40 CFR 60 Appendix A.
- (15) EPA Method 15 -- Determination of Hydrogen Sulfide, Carbonyl Sulfide and Carbon Disulfide Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
 - (a) EPA Method 15A -- Determination of Total Reduced Sulfur Emissions from Sulfur Recovery Plants in Petroleum Refineries -- 40 CFR 60 Appendix A.
- (16) EPA Method 16 -- Semicontinuous Determination of Sulfur Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
 - (a) EPA Method 16A -- Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique) -- 40 CFR 60 Appendix A.
 - (b) EPA Method 16B -- Determination of Total Reduced Sulfur Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
- (17) EPA Method 17 -- Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method) -- 40 CFR 60 Appendix A.
- (18) EPA Method 18 -- Measurement of Gaseous Organic Compound Emissions by Gas Chromatography -- 40 CFR 60 Appendix A.
- (19) EPA Method 19 -- Determination of Sulfur Dioxide Removal Efficiency and Particulate, Sulfur Dioxide and Nitrogen Oxides Emission Rates -- 40 CFR 60 Appendix A.
- (20) EPA Method 20 -- Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines -- 40 CFR 60 Appendix A.
- (21) EPA Method 21 -- Determination of Volatile Organic Compound Leaks -- 40 CFR 60 Appendix A.
- (22) EPA Method 22 -- Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares -- 40 CFR 60 Appendix A.
- (23) EPA Method 23 -- Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources -- 40 CFR 60 Appendix A.
- (24) EPA Method 24 -- Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings -- 40 CFR 60 Appendix A.
 - (a) EPA Method 24A -- Determination of Volatile Matter Content and Density of Printing Inks and Related Coatings -- 40 CFR 60 Appendix A.
 - (b) Reserved.
- (25) EPA Method 25 -- Determination of Total Gaseous Non-methane Organic Emissions as Carbon -- 40 CFR 60 Appendix A.
 - (a) EPA Method 25A -- Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer -- 40 CFR 60 Appendix A.
 - (b) EPA Method 25B -- Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer -- 40 CFR 60 Appendix A.
- (26) EPA Method 26 -- Determination of Hydrogen Chloride Emissions from Stationary Sources -- 40 CFR 60 Appendix A.
 - (a) EPA Method 26A -- Determination of Hydrogen Halide and Halogen Emissions From Stationary Sources - Isokinetic Method -- 40 CFR 60, Appendix A.
- (27) EPA Method 27 -- Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test -- 40 CFR 60 Appendix A.
- (28) EPA Method 28 -- Certification and Auditing of Wood Heaters -- 40 CFR 60 Appendix A.

- (a) EPA Method 28A -- Measurement of Air to Fuel Ratio and Minimum Achievable Burn Rates for Wood-Fired Appliances -- 40 CFR 60 Appendix A.
- (29) Reserved.
- (30) Reserved.
- (31) EPA Appendix F -- Quality Assurance Procedures --
- (32) EPA Method 101 -- Determination of Particulate and Gaseous Mercury Emissions from Chlor-Alkali Plants - Air Streams -- 40 CFR 61 Appendix B.
 - (a) EPA Method 101A -- Determination of Particulate and Gaseous Mercury Emissions from Sewage Sludge Incinerators -- 40 CFR 61 Appendix B.
- (33) EPA Method 102 -- Determination of Particulate and Gaseous Mercury Emissions from Chlor-Alkali Plants - Hydrogen Streams -- 40 CFR 61 Appendix B.
- (34) EPA Method 103 -- Beryllium Screening Method -- 40 CFR 61 Appendix B.
- (35) EPA Method 104 -- Determination of Beryllium Emissions from Stationary Sources -- 40 CFR 61 Appendix B.
- (36) EPA Method 105 -- Determination of Mercury in Wastewater Treatment Plant Sewage Sludges -- 40 CFR 61 Appendix B.
- (37) EPA Method 106 -- Determination of Vinyl Chloride Emissions from Stationary Sources -- 40 CFR 61 Appendix B.
- (38) EPA Method 107 -- Determination of Vinyl Chloride Content of Inprocess Wastewater Samples, and Vinyl Chloride Content of Polyvinyl Chloride Resin, Slurry, Wet Cake, and Latex Samples -- 40 CFR 61 Appendix B.
 - (a) EPA Method 107A -- Determination of Vinyl Chloride Content of Solvents, Resin-Solvent Solution, Polyvinyl Chloride Resin, Resin Slurry, Wet Resin, and Latex Samples -- 40 CFR 61 Appendix B.
- (39) EPA Method 108 -- Determination of Particulate and Gaseous Arsenic Emissions 40 CFR 61 Appendix B.
 - (a) EPA Method 108A -- Determination of Arsenic Content in Ore Samples from Nonferrous Smelters -- 40 CFR 61 Appendix B.
 - (b) EPA Method 108B -- Determination of Arsenic Content in Ore Samples from Nonferrous Smelters -- 40 CFR 61 Appendix B.
 - (c) EPA Method 108C -- Determination of Arsenic Content in Ore Samples from Nonferrous Smelters -- 40 CFR 61 Appendix B.
- (40) 40 CFR 61 Appendix C -- Quality Assurance Procedures.
- (41) EPA Method 201 -- Determination of PM₁₀ Emissions (Exhaust Gas Recycle Procedure) -- 40 CFR 51 Appendix M.
 - (a) EPA Method 201A -- Determination of PM₁₀ Emissions (Constant Sampling Rate Procedure) -- 40 CFR 51 Appendix M.
- (42) EPA Method 202 -- Determination of Condensable Particulate Emissions from Stationary Sources -- 40 CFR 51 Appendix M.
- (43) EPA Method 301 -- Field Data Validation Protocol -- 40 CFR Part 63, Appendix A.
- (44) EPA Method 303 -- Coke Oven Door Emissions -- 40 CFR Part 63, Appendix A.

History: Formerly 17-2.700(6)(b), Amended 10-14-92, 6-29-93; Formerly 17-297.401; Amended 11-23-94, 1-1-96, 3-13-96.

62-297.401

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94
1 st Revision	11/23/94	12/21/94	06/16/99	64 FR 32346	08/16/99
2 nd Revision	03/13/96	04/15/96	06/16/99	64 FR 32346	08/16/99

62-297.411 DEP Method 1.

Sample and velocity traverses for stationary emissions units. The provisions of EPA Method 1 (40 CFR 60, Appendix A) are adopted by reference except for the following:

- (1) 1 by 2 Matrix for Rectangular Stacks, EPA Method 1, Section 2.3.2.

The tester shall use the following criterion: For rectangular stacks, divide the cross-section into as many rectangular areas as traverse points, such that the length to width ratio of the elemental areas is between one and two, and locate the traverse points at the centroid of each equal area.

- (2) Verification of Absence of Cyclonic Flow.

For a stack with cyclonic or swirling flow conditions, use Section 2.4 of EPA Method 1 except that the average value of alpha must be lower than or equal to 20 degrees for acceptable overall flow conditions.

History: Formerly 17-2.700(6)(a)1, Formerly 17-297.411, Amended 11-23-94, Repealed 1-1-96.

62-297.411

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
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1 st Revision	11/23/94	12/21/94	06/16/99	64 FR 32346	08/16/99

62-297.412 DEP Method 2.

Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube). The provisions of EPA Method 2 (40 CFR 60, Appendix A) are adopted by reference.

History: Formerly 17-2.700(6)(a)2, Formerly 17-297.412, Repealed 1-1-96.

-----62-297.412

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94

62-297.413 DEP Method 3.

Gas Analysis For Carbon Dioxide, oxygen, Excess Air, and Dry Molecular Weight. The provisions of EPA Method 3 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

- (1) Molecular Weights Assigned by Test Condition, EPA Method 3 Section 1.2. The tester may choose to assign the following values for dry molecular weight.
 - (a) A value of 30.0, dry molecular weight, for processes burning any combination of natural gas, oil, coal or carbonaceous fuel.
 - (b) A value of 29.0, dry molecular weight, for processes emitting essentially air.
- (2) Calculations Correcting Concentrations to 50% Excess Air (EA), EPA Method 3, Section 1.2. When a correction of pollutant emission concentration to 50 % excess air is required by applicable parts of this chapter or by Rules 62-296.401 through 62-296.414, F.A.C., the following equation shall be used:

$$Cs_{50} = \frac{Cs (100 + \% EA)}{150}$$

Equation 3-1A

where: Cs_{50} is the pollutant concentration at 50% excess air:

Cs is the pollutant concentration computed at standard conditions on a dry basis:

% EA is calculated by equation 3-1:

$$\% EA = \frac{\% O_2 - 0.5\% CO \times 100}{0.264\% N_2 - (\% O_2 - 0.5\% CO)}$$

Equation 3-1

History: Formerly 17-2.700(6)(a)3, Formerly 17-297.413, Repealed 1-1-96.

62-297.413

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94

62-297.415 DEP Method 5.

Determination of Particulate Emissions From Stationary Emissions Units (By Liquid Impingement).

- (1) Principle. A sample of the flue gas is withdrawn isokinetically from an emissions unit and particulate matter is collected by a series of impingers followed by a filter. The weight of particulate matter is determined gravimetrically after removal of uncombined water from the impinger solution, probe/glassware washing and filter.
- (2) Apparatus.
 - (a) Sampling Train. A schematic of the sampling train is shown in Figure 297.415-1. The sampling train consists of the following components:
 1. The probe nozzle shall be stainless steel (316), glass, or quartz with a sharp, tapered leading edge. The angle of the taper shall be less than or equal to 30 degrees and the taper shall be on the outside to preserve a constant internal diameter. The nozzle shall be of a button-hook or elbow design. If stainless steel is used, the nozzle shall be constructed from seamless tubing.
 2. The probe liner shall be borosilicate or quartz glass, Teflon, Incoloy 825 or stainless steel 316. Probe heating is not required. At the option of the tester a flexible hose between the probe and first impinger may be used. The hose shall be no more than two times the probe length or 25 feet long, whichever dimension is shorter. The flexible hose shall be made of Tygon, Teflon, or polyethylene or other nonreactive material with a smooth internal surface.
 3. The pitot tube shall be Type S, as described in EPA Method 2, Section 2.1. The pitot tube shall be attached to the probe to allow constant monitoring of the stack gas velocity. The impact (high pressure) opening plane of the pitot tube shall be even with or above the nozzle entry plane (Figure 297.415-2) during sampling. The Type S pitot tube shall have a known coefficient as provided in EPA Method 2, Section 4.
 4. Differential Pressure Gauge. Two inclined manometers or equivalent devices as described in EPA Method 2, Section 2.2 shall be used. one manometer shall be used for velocity (delta P) readings and the other for orifice differential readings (delta P).
 5. Filter holders shall be borosilicate glass or stainless steel (316) with a glass or stainless steel (316) frit filter support and a silicone rubber, Teflon, or Viton gasket. The holder shall provide a positive seal against leakage from the outside or around the filter. The filter shall be connected to the exit of the dry trap and entrance to the silica gel impinger.
 6. Condenser. The following system shall be used to determine the stack gas moisture content: Four impingers connected as shown in Figure 297.415-1 with leak free, noncontaminating fittings. The filter is connected between the third and fourth impingers. The first, third and fourth impingers shall be of the Greenburg-Smith design, modified by replacing the tip with 1.3 cm (1/2 in.) I.D. glass tubing extending to 1.3 cm (1/2 in.) from the bottom of the flask. The second impinger shall be an unmodified Greenburg-Smith design. The first and second impingers shall contain measured quantities of water, the third shall be empty, and the fourth shall contain a measured quantity of silica gel. A thermometer capable of measuring the outlet temperature to within 1 degrees Celsius (2 degrees Fahrenheit) shall be placed in the exit stream of the fourth impinger.
 7. The metering system shall consist of a vacuum gauge, leak-free pump, thermometers capable of measuring temperature to within 3 degrees Celsius (5.4 degrees Fahrenheit), dry gas meter capable of measuring volume to within two percent, and related equipment, as shown in Figure 297.425-1. Isokinetic sampling rate is controlled with the use of the system.
 8. Barometer. A device capable of measuring atmospheric pressure to within 2.5 mm Hg (0.1 in. Hg) shall be used. Alternatively, barometric pressure may be obtained from the nearest national weather service station and a correction shall be applied to compensate for elevation differences between the barometric pressure measurement point and the sampling meter.

9. Gas Density Determination Equipment. The tester shall use a temperature sensor and pressure gauge as described in EPA Method 2, Sections 2.3 and 2.4, and a gas analyzer as described in EPA Method 3. When stack temperature is measured, the temperature sensor must be attached in an interference-free arrangement with respect to the Type S pitot openings (Figure 297.415-3).
- (b) Sample Recovery Equipment.
1. Probe Liner and Probe-Nozzle Brushes. The tester shall use brushes made from inert materials such as nylon, or teflon with nylon, teflon or stainless steel handles and extensions. The brushes shall be properly shaped and sized to brush out the probe liner nozzle and filter holder.
 2. Wash Bottles. Two are required and shall be made of glass, polyethylene, or teflon. Acetone used for probe washing shall not have been stored in polyethylene bottles for longer than 30 days.
 3. Sample Storage Containers. Glass, teflon, high density polyethylene bottles of 500 to 1000 ml capacity shall be used.
 4. Storage Dishes. Filters shall be stored flat in glass, metal or polyethylene storage dishes.
 5. Graduated Cylinder and/or Balance. Condensed water shall be measured to within 1 ml or 1 g using either a graduated cylinder with subdivisions no greater than 2 ml or a laboratory balance capable of readings to 0.5 g or less.
 6. Silica gel storage containers. Plastic or glass airtight containers shall be used.
- (c) Analytical Apparatus shall consist of:
1. Inert weighing dishes.
 2. Desiccator stocked with anhydrous calcium sulfate indicating-desiccant.
 3. Analytical balance with enclosed, desiccated weighing enclosure and capable of weighing to 0.1 mg.
 4. Balance to measure to 0.5 g.
 5. Beakers, 250 ml, borosilicate glass.
 6. Inert vacuum filtration system.
 7. Pyrex glass filtering media for vi. above with 98 percent retention efficiency at 0.2 micron particle size.
 8. Hygrometer to measure relative humidity of the laboratory environment.
 9. Temperature gauge to measure the temperature of the laboratory environment.
- (3) Reagents/Filter Media.
- (a) Sampling. The reagents required are as follows:
1. Filters. Glass fiber filters, without organic binder, exhibiting at least 99.95 percent efficiency on 0.3 micron dioctyl phthalate smoke particles.
 2. Silica Gel. Indicating type, 5 to 16 mesh. If previously used, dry at 175 degrees Celsius (350 degrees Fahrenheit) for two hours. New silica gel may be used as received.
 3. Water. Analysis of the material caught in the impingers is required, and distilled or deionized water shall be used. Run blanks prior to field use to eliminate a high blank, above 0.001 percent residue.
 4. Crushed Ice.
 5. Stopcock grease. Acetone insoluble, heatstable grease shall be used unless screw-on connectors with Teflon sleeves are used.
- (b) Sample Recovery.
1. Acetone. Reagent grade (less than or equal to 0.001 percent residue) in glass storage bottles shall be used.
 2. Distilled or Deionized Water. Distilled or deionized water (less than or equal to 0.001 percent residue) shall be used.
- (c) Analysis.
1. Acetone. Reagent grade (less than or equal to 0.001 percent residue) in glass bottles.
 2. Desiccant. Anhydrous calcium sulfate, indicating type.

- (4) Procedures.
- (a). Sampling.
1. Pretest Preparation. All components shall be maintained and calibrated so as to allow isokinetic sampling of particulate emissions with documented evidence of all sampling and analytical calibrations for each submitted emission measurement.
 - a. Dry silica gel weight shall be determined and recorded to the nearest 0.5 g for each sampling run.
 - b. Check sampling filters visually and do not use any with irregularities, flaws or pinholes. Clearly number the glass fiber filters on the back side near the edge. The filters shall be oven dried at 105 degrees Celsius (220 degrees Fahrenheit) for two hours, desiccated at ambient temperature for two hours, and then weighed to the nearest 0.1 mg. Optionally, desiccate the filter at ambient temperature and pressure for at least 24 hours. Weigh each filter at intervals of at least 6 hours until they attain a constant weight, i.e., less than 0.5 mg change from previous weighing. Do not expose filter being weighed to a relative humidity above 50% for longer than 1 minute. Record the results to the nearest 0.1 mg. Record the relative humidity and dry bulb temperature of the air in the laboratory at the time of weighing.
 2. Preliminary Determinations. Select the sampling site and traverse points according to EPA or DER Method 1. Determine the stack pressure, temperature, and preliminary velocity traverse using EPA or DER Method 2. Prior to test, determine the moisture content using EPA Method 4 or by knowledge of the process. Determine the stack gas dry molecular weight using EPA or DER Method 3. Select a sampling nozzle such that it can be used during the entire isokinetic run. Do not change nozzle size during the run. Select a sample time such that each traverse point is sampled for at least 2 minutes, and the sample volume (computed at dry standard conditions) is at least equal to the volume specified in the applicable rule. Reference Rule 62-297.330(3), F.A.C., for required sampling rate range.
 3. Preparation of Sampling Train.
 - a. During preparation and assembly of the sampling train, keep all openings sealed where contamination can occur, until just prior to assembly or until sampling is about to begin.
 - b. Place 100 ml of water in each of the first two impingers, leave the third empty, and transfer a known weight of between 200 to 300 g of silica gel to the fourth impinger. Silica gel shall not be entrained and carried out from the impinger during sampling.
 - c. Using a tweezer or clean disposable gloves, place an identified and weighed filter in the filter holder. The filter shall be properly centered and the gasket properly placed so as to prevent the sample gas from circumventing the filter. Check the filter for tears after assembly is completed. Replace if torn. Mark the probe to denote the proper distance into the stack or duct for each sampling point. Install the sampling nozzle using a leak-free connection.
 - d. Set up the train as shown in Figure 297.415-1 using a very light coat of silicone grease on any ground glass joints, greasing only the outer portion to avoid possibility of sample contamination by the silicone grease. Place ice around the impingers.
 - e. Post Test Leak Check. The sampling train shall be leak-checked by plugging the nozzle and pulling a 15 inch Hg vacuum. The coarse adjustment valve on the sampling train gas metering system must be open during this check. A lower vacuum may be used, provided that it was not exceeded during the test. Leakage rates in excess of 4 percent of the average sampling rate or 0.02 cfm, whichever is less, must be corrected for in the computed test results as shown in EPA

Method 5 or void the sampling run.

If an asbestos string is used to seal the sampling nozzle, the tester may, as an option to e. above, perform the following leak-checks. Do not connect the nozzle to the probe during the leak check. Instead leak-check the train by plugging the inlet to the probe liner and by conducting the leak check as previously described in this subsection. Then connect the nozzle to the probe and conduct a second leak check in accordance with this subsection but at a vacuum of 1 in. Hg. Correct for any leakage rate in excess of 4 percent of the average sampling rate or 0.02 cfm.

4. Sampling Train Operation. Sampling train shall be operated in accordance with the provisions of EPA Method 5, Section 4.1.
- (b) Sample Recovery.
1. After the run is complete, remove the probe from the stack and allow it to cool until it can be safely handled. Carefully wipe off all external particulate material near the tip. Record the final sample volume. Remove all condensate from the probe and flexible hose.
 2. Remove the probe from the sampling train, wipe off excess silicone grease and cap the ends of the probe and the impinger inlet. Remove the umbilical cord from the last impinger and seal this impinger. Seal both ends of the flexible umbilical. Transfer the probe umbilical and impinger filter assembly to the cleanup area.
 3. Save a 100 ml portion of the acetone or water used for cleanup as a blank. Take 100 ml of the wash liquid directly from the wash bottle being used, transfer to a clean sample bottle, and label with the type of contents, the date, the tester's name and the unit tested.
 4. Inspect the sampling train prior to and during disassembly and record evidence of any components that are not in proper operating condition. Treat samples as follows:
 - a. Filter. Carefully remove each filter from the filter holders with tweezers or gloves and place it in an identified storage container. Transfer to the storage container or the probe wash container any particulate matter or filter fibers which adhere to the filter holder or the filter holder gasket. Use an inert bristle brush and/or a sharp blade to remove this material. Seal the container.
 - b. Sampling Train Washes. Washing will be done using water or acetone as specified in the applicable rule. The wash will be performed as follows for either wash liquid: The tester shall quantitatively recover particulate and any condensable matter from the interior surfaces of the probe nozzle, probe fitting(s), probe liner, flexible umbilical (if used) and front half of the filter holder by washing and brushing with acetone or water, whichever is specified in the applicable rule, until no visible particles are present in the wash.
 - (i) The nozzle and its fitting shall be removed from the probe before washing. Brushing and rinsing of the nozzle and fitting shall continue until no visible particles are present in the wash, then a final rinse is done after removing the brush. The brush is to be rinsed after completing each wash.
 - (ii) The probe liner shall be tilted up from horizontal and rotated while rinsing from the upper end so as to wet all interior surfaces with rinse liquid. A wet brushing of the liner shall follow rinsing. Hold the probe in an inclined position, squirt wash liquid into the upper end as the probe brush is being pushed with a twisting action through the probe. Run the brush through the probe three or more times for glass probes, six or more times for metal liners. No particulate matter shall be visible in the final rinse and none shall remain in the probe on visual inspection. Rinse again after final brushing, tilting the probe and rotating so as to wet all interior surfaces. Rinse the brush after the brushing procedure is complete. Quantitatively collect all wash liquid.

- Transfer all wash liquids into a clean labeled container. Rinse the transfer funnel into the sample container. Protect the brushes from contamination between sample runs.
- (iii) The flexible umbilical, when used, shall be securely fixed to a flat rigid surface in a straight line for washing. Umbilicals longer than 15 feet may be washed in two successive, overlapping sections; otherwise, washing procedures are identical to those used for probe liners.
 - (iv) The front half of the filter holder shall be washed after any silicone grease has been wiped from the joints. Rub inside surfaces with an inert bristle brush while washing with acetone or water as specified in the applicable rule. Wash each surface three or more times as necessary to remove visible particulate matter. Make a final rinse of the holder and brush used.
 - (v) Quantitatively transfer all washes into the clean sample container and seal so that no acetone or water will leak out when the bottle is transferred to the laboratory. Mark the height of the fluid level to determine whether or not leakage occurred during transport. Label the container clearly and indelibly to identify the contents including the sample site identification, date, test run number, and tester's name.
- c. Silica gel. Note the color of the indicating silica gel to determine whether it has been completely spent and make a notation of its condition. Transfer the silica gel from the fourth impinger to the original container and seal. If a balance is available in the field, follow the procedure for silica analysis in EPA Method 5, Section 4.3.
 - d. Impinger Water. Treat the impingers as follows: Make a notation of any color or film in the liquid catch. Measure the liquid in the first three impingers to within plus or minus 1.0 g or 1 ml by using a balance or a graduated cylinder. Record the amount of liquid present. Transfer the impinger liquid contents into a clean storage container. Wash the impinger flasks, impinger inserts, interconnecting glassware and graduated cylinder. If an acetone probe wash has been used, wash the impinger components with acetone. If a water probe wash was used, wash the impinger components with water. Wash and brush with an inert bristle brush all of the first three impinger interior surfaces and the interior surfaces of the interconnecting glassware until no visible particulate remains. Rinse the brush often during use. Quantitatively collect all washes. Add acetone wash, if used to the probe wash sample. Add water wash, if used, to the impinger water storage container. Seal the sample bottles so that no leakage will occur during transport to the laboratory. Label the sample clearly and include: contents, sample site identification, number of test run, date, and name of tester. Mark the fluid height level so that leakage will be detected.
 - e. Blank samples will be collected at the sample site at a rate of one blank of each type described herein for each set of three consecutive sample runs. Collection shall be made at some time after the sample recovery of the first run and before completion of sample recovery of the third run for each set of three consecutive runs at one sample location. Blank samples shall be collected at the same location at which all sample recovery operations are performed, using the same transfer techniques and equipment (including transfer or collection bottle and funnels). Blanks shall be drawn from the same wash bottles used for sample recovery washing and from the same stock of filters used for filter holder reloading. The following blanks and additional procedures are required:
 - (i) Filter blanks shall consist of unused, tared filters and shall be removed from their storage containers and transferred to clean storage dishes and

- sealed.
 - (ii) Acetone or water blanks. 100 plus or minus 10 ml of wash are transferred from the wash bottle into a clean sample bottle. The bottle is sealed.
 - (iii) Blank Storage. The above blank samples shall be labeled clearly to identify the contents, plant name, sample site identification, date and name of tester. Blank samples shall be stored so as to preserve their integrity from loss or contamination.
- (5) Analysis.
 - (a) Sample Filter and Blank Filter. Leave the contents of the storage dish in the shipping container or transfer the filter and any loose particulate from the sample container to a tared weighing dish. The filters shall be placed in a desiccator containing anhydrous calcium sulfate for 24 hours and weighed at 6 hour intervals until the weight is constant. As an option, the filter may be oven dried at 105 degrees Celsius (221 degrees Fahrenheit) for 2 to 3 hours, cooled in a desiccator containing anhydrous calcium sulfate, and weighed after 2 hour cooling. Do not expose filter being weighed to a relative humidity above 50% for longer than 1 minute. Record the relative humidity and dry bulb temperature of the laboratory air. For purposes of analysis, the term "constant weight" means a difference of no more than 0.5 mg or 1 percent of the total weight less tare weighings. At least 6 hours of desiccation time is required between weighings. Report the weight to the nearest 0.1 mg.
 - (b) Silica Gel. Determine the increase in weight of the silica gel.
 - (c) Impinger Water and Impinger Blank. These samples are analyzed for particulate by the following procedures.
 - Shake the sample bottles and check to assure that no liquid has been lost since testing. Record the quantity of sample lost.
 - 1. Place the impinger water samples and blank samples into separate tared beakers and evaporate each to dryness over low heat (max. 95 degrees Celsius) at ambient pressure.
 - 2. Alternatively, if no suspended particulate is visible in the samples, an aliquot (100 ml. minimum) of the impinger water and wash may be evaporated to dryness at low heat (max. 95 degrees Celsius) and ambient pressure instead of the complete sample.
 - 3. Alternatively, if suspended particulate is visible, the sample may be filtered using a tared filter to determine insoluble particulate and an aliquot (100 ml. minimum) of the filtrate shall be analyzed for soluble particulate. This filter shall be analyzed using the same preparation and analytical methods as sample train filters except that the water wash filter shall be washed with at least 1000 ml of water prior to the initial taring process.
 - (d) Acetone Wash and Blank.
 - 1. The analysis shall be made in accordance with EPA Method 5, Section 4.3, Container No. 2.
 - 2. Acetone Blank Analysis. The analysis shall be made in accordance with the EPA Method 5, Section 4.3, Container No. 1.
- (6) Calibration. Calibration of the sampling train shall be conducted in accordance with the schedule shown in Table 297.310-1.
- (7) Calculations. The calculations shall be made in accordance with EPA Method 5, Section 6, with the following exceptions:
 - (a) Total Particulate Weight. EPA Method 5, Section 6.8.
 - 1. Water Wash Sampling. Determine the total particulate catch from the sum of the weights obtained from the filter analysis, the wash analysis, and the impinger water analysis, less the water and filter blank analysis.
 - 2. Acetone Wash Sampling. Determine the total particulate catch from the sum of the weights obtained from the filter analysis, the wash analysis and the impinger water analysis minus the acetone and impinger water blank analysis.
 - (b) Acceptable Sampling Rates. If the calculated isokinetic rate for each run is between 90 percent and 110 percent of isokinetic, inclusive, the rates are acceptable. If the measured emissions are

low in comparison to the emission limiting standard (equal to or less than 80 percent of the standard) and if the isokinetic rate for a run is between 80 percent and 110 percent of isokinetic inclusive, the sampling rate is acceptable.

History: Formerly 17-2.700(6)(a)5.a, Formerly 17-297.415; Amended 11-23-94, Repealed 1-1-96.
-----62-297.415

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1 st Revision	11/23/94	12/21/94	06/16/99	64 FR 32346	08/16/99

62-297.416 DEP Method 5A.

Determination of Total Particulate Emission Rate and Particle Size Distribution From Liquid Sulfur Tank Vents. (Reserved).

History: Formerly 17-2.700(6)(a)5.b, Formerly 17-297.416, Repealed 1-1-96.

-----62-297.416

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Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94

62-297.417 DEP Method 6.

Determination of Sulphur Dioxide Emissions from Stationary Emissions Units. The provisions of EPA Method 6 (40 CFR 60, Appendix A) are adopted by reference except for the following:

Simultaneous Particulate Sampling, EPA Method 6, Section 2.1.

The tester shall not determine particulate and SO₂ simultaneously.

History: Formerly 17-2.700(6)(a)6, Formerly 17-297.417, Amended 11-23-94, Repealed 1-1-96.

----- 62-297.417

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**62-297.423 EPA Method 12 - Determination of Inorganic Lead Emissions
from Stationary Emissions Units.**

Promulgated April 16, 1982, Federal Register.

History: Formerly 17-2.700(6)(a)12, Formerly 17-297.423, Amended 11-23-94, Repealed 1-1-96.

-----62-297.423

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1 st Revision	11/23/94	12/21/94	06/16/99	64 FR 32346	08/16/99

62-297.440 Supplementary Test Procedures.

The following test procedures are adopted by reference. Copies of these documents are available from the emissions units set forth below. Copies may also be inspected at the Department's Tallahassee Office.

- (1) ASTM Methods. Standard Methods published by the American Society for Testing and Materials are available from the Society at 1916 Race Street, Philadelphia, Pennsylvania 19103.
 - (a) ASTM D 322-67, 1972. Standard Method of Test for Dilution of Gasoline Engine Crankcase oils.
 - (b) ASTM D 396-76. Standard Specification for Fuel oils, superceding ASTM D 396-69.
 - (c) ASTM D 2880-76. Standard Specification for Gas Turbine Fuel Oils, superceding ASTM D 2880-71.
 - (d) ASTM D 975-77. Standard Specification for Diesel Fuel Oils, superceding ASTM D 975-68.
 - (e) ASTM D 323-72. Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).
 - (f) ASTM D 97-66. Standard Test Method for Pour Point of Petroleum Oils.
- (2) EPA Reports. EPA occasionally publishes test methods and emission control guidelines in a report format. These documents are available from the National Technical Information Services, 5286 Port Royal Road, Springfield, Virginia 22216, and may be inspected at the Department's Tallahassee Office.
 - (a) Petroleum Liquid Storage.
 1. Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks, EPA 450/2-78-047, p. 5-3.
 2. Control of Volatile Organic Emissions from Storage .of Petroleum Liquids in Fixed-Roof Tanks, EPA 450/2-77-036, p. 6-2.
 - (b) Gasoline Bulk Terminals.
 1. Vapor Control System Test.
 - a. VOC emissions from the vapor control system shall be determined by the method given in Appendix A of EPA 450/2-77-026, except that an adequate sampling time shall be at least six (6) hours of operation. For continuous vapor processing systems at least 80,000 gallons (302,800 liters) of gasoline shall be loaded during the test. For intermittent vapor processing systems, at least 80,000 gallons (302,800 liters) of gasoline shall be loaded during the test and at least two full cycles of operation of the vapor processing system shall occur. This test shall be performed prior to the date of compliance and annually thereafter. Test results records shall be maintained at the terminal until the subsequent annual test shall be made available to the Department upon request.
 - b. Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals, EPA 450/2--77-026, Appendix A. Emission Test Procedure for Tank Truck Gasoline Loading Terminals.
 2. Vapor Leak Detection.
 - a. During loading or unloading operations at bulk terminals, there shall be no reading greater than or equal to 100 percent of the lower explosive level (LEL), measured as propane at 1 in. (2.5 centimeters) around the perimeter of a potential leak source as detected by a combustible gas detector using the procedure described in Appendix B of EPA 450/2-78-051.
 - b. Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems, EPA 450/2-78-051, Appendix B, Gasoline Vapor Leak Detection Procedures by Combustible Gas Detector.
 - (c) Gasoline Service Stations.
 1. Design Criteria for Stage I Vapor Control: Gasoline Service Stations, USEPA, OAQPS, ESED, November, 1975.
 2. [Reserved]
 - (d) Non-destructive Control Devices.
 1. Measurement of Volatile Organic Compounds, EPA 450/2-78-041, Attachment 3, Alternate Test for Direct Measurement of Total Gaseous Organic Compounds Using a

- Flame Ionization Analyzer.
- 2. [Reserved]
- (e) Perchloroethylene Dry Cleaning Systems.
 - 1. Control of Volatile organic Emissions from Perchloroethylene Dry Cleaning Systems, EPA 450/2-78-050, p. 6-3, Compliance Procedures, Liquid Leakage.
 - 2. RACT Compliance Guidance for Carbon Absorbers on Perchloroethylene Dry Cleaners. Task No. 119, Contract No. 68-01-4147. EPA, DSSE, May, 1980, pp. 8-21, Appendices A and B.
- (f) Cross Recovery Determination. When determining if a kraft recovery furnace is a straight kraft or cross recovery furnace the procedure in 40 CFR 60.285(d)(4) of Subpart BB shall be used.
- (3) American Conference of Governmental Industrial Hygienists, Recommended Practices -- Industrial Ventilation: A Manual of Recommended Practice. Equipment Specifications published in the 16th Edition of the Industrial Ventilation Manual (or any subsequent versions approved by the Department) are available from the American Conference of Governmental Industrial Hygienists, Committee on Industrial Ventilation, P. O. Box 16153, Lansing, Michigan 48901, and may be inspected at the Department's Tallahassee office.
- (4) American Petroleum Institute (API) Recommended Practices -- These are available from the API, 2101 L Street, Northwest, Washington, D.C., 20037
 - (a) API Standard 650, Welded Steel Tanks for Oil Storage, Sixth Edition, Revision 1, May 15, 1978.
 - (b) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February, 1980.
 - (c) API 1004, Bottom Loading and Vapor Recovery for MC-306 Tank Motor Vehicles, Fourth Edition, September 1, 1977.
- (5) Technical Association of the Pulp and Paper Industry (TAPPI), Test Methods -- These are available from TAPPI, P. O. Box 105113, Atlanta, Georgia 30348.
 - (a) TAPPI Method T.624, Analysis of Soda and Sulfate White and Green Liquors.
 - (b) (Reserved).
- (6) Sulphur Development Institute of Canada (SUDIC) Sampling and Testing Sulphur Forms -- These are available from SUDIC, Box 950, Bow Valley Square 1, 830, 202-6 Avenue S.W., Calgary, Alberta T2P 2W6.
 - (a) S1-77. Collection of a Gross Sample of Sulphur.
 - (b) S2-77. Sieve Analysis of Sulphur Forms, except paragraph 4.3 concerning wet sieving is not adopted.
 - (c) S3-77. Determination of Material Finer than No. 50 (300um) Sieve in Sulphur Forms by Washing.
 - (d) S5-77. Determination of Friability of Sulfur Forms.
- (7) EPA VOC Capture Efficiency Test Procedures. Adopted by reference is an EPA memo dated April 16, 1990 entitled, "Guidelines for Developing a State Protocol for the Measurement of Capture Efficiency." A copy can be obtained by writing to: Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.
 - (a) Procedure F.1 -- Fugitive VOC Emissions from Temporary Enclosures.
 - (b) Procedure F.2 -- Fugitive VOC Emissions from Building Enclosures.
 - (c) Procedure G.1 -- Captured VOC Emissions.
 - (d) Procedure G.2 -- Captured VOC Emissions (dilution technique).
 - (e) Procedure L -- VOC in Liquid Input Stream.
 - (f) Procedure T -- Criteria for and Verification of Permanent or Temporary Total Enclosure.

History: Formerly 17-2.700(6)(c); Amended 6-29-93, Formerly 17-297.440, Amended 11-23-94, 1-1-96.
-----62-297.440

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94
1 st Revision	11/23/94	12/21/94	06/16/99	64 FR 32346	08/16/99

62-297.450 EPA VOC Capture Efficiency Test Procedures.

- (1) **Applicability.** The requirements set forth in Rules 62-297.450(2) and (3), F.A.C., shall apply to all regulated VOC emitting emissions units employing a control system pursuant to Rules 62-296.501 through 62-296.516, F.A.C., and Rule 62-296.800, F.A.C., except as provided in Rules 62-297.450(1)(a) and (b), F.A.C.
- (a) If an owner or operator installs a Permanent Total Enclosure that meets the specifications of Procedure T, and which directs all VOC to a control device, the capture efficiency is assumed to be 100 percent, and the facility owner or operator is exempted from the requirements described in Rule 62-297.450(2), F.A.C. This does not exempt the owner or operator from conducting any required control device efficiency test.
- (b) If the owner or operator of an affected activity, process, or emissions unit uses a nondestructive control device designed to collect and recover VOC (e.g. carbon adsorber), an explicit measurement of capture efficiency is not necessary if the owner or operator is able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average, and can determine this within 72 hours following each 24-hour period, and one of the following two criteria is also met:
1. The solvent recovery system (i.e., capture and control system) is dedicated to a single activity, process line, or emissions unit (e.g., one process line venting to a carbon adsorber system), or
 2. The solvent recovery system controls multiple activities, process lines, or emissions units, and the owner or operator is able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all activities, process lines, or emissions units venting of the control system) meets or exceeds the most stringent emission standard applicable for any activity, process line, or emissions unit venting to the control system.
- (c) If the conditions given above in Rule 62-297.450(1)(b), F.A.C., are met, the overall emission reduction efficiency of the system can be determined by dividing the recovered liquid VOC by the input liquid VOC. The general procedure for this determination is given in 40 CFR 60.433, which is adopted by reference.
- (2) **Specific Requirements.** The capture efficiency of a capture system shall be determined using one of the following EPA procedures, or an alternate capture efficiency test procedure if approved by the Department under the provisions of Rule 62-297.620, F.A.C.
- (a) **Gas/gas method using a Temporary Total Enclosure.** The EPA specifications to determine whether an enclosure is considered a Temporary Total Enclosure are given in Procedure T, which is adopted by reference in Rule 62-296.810, F.A.C. The capture efficiency equation to be used for this procedure is:
- $$CE = Gw / (Gw + Fw) \quad \text{where:}$$

CE = capture efficiency, decimal fraction, times 100 (percentage)
Gw = mass of VOC captured and delivered to control device using a Temporary Total Enclosure
Fw = mass of fugitive VOC that escapes from a Temporary Total Enclosure
Procedure G.2 is used to obtain Gw. Procedure F.1 is used to obtain Fw.
- (b) **Liquid/gas method using Temporary Total Enclosure.** The EPA specifications to determine whether an enclosure is considered a Temporary Total Enclosure are given in Procedure T, which is adopted by reference in Rule 62-296.810 F.A.C. The capture efficiency equation to be used for this procedure is:
- $$CE = (L - F) / L \quad \text{where:}$$

CE = capture efficiency, decimal fraction, times 100 (percentage)
L = mass of liquid VOC input to the activity, process, or emissions unit

F = mass of fugitive VOC that escapes from a Temporary Total Enclosure
Procedure L is used to obtain L. Procedure F.1 is used to obtain F.

- (c) Gas/gas method using the building or room in which the affected activity, process, or emissions unit is located as the enclosure and in which G and F are measured while operating only the affected activity, process, or emissions unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this procedure is:

$CE = G/(G + F_B)$ where:

CE = capture efficiency, decimal fraction, times 100 (percentage)

G = mass of VOC captured and delivered to a control device

F_B = mass of fugitive VOC that escapes from building enclosure

Procedure G.2 is used to obtain G. Procedure F.2 is used to obtain F_B.

- (d) Liquid/gas method using the building or room in which the affected activity, process, or emissions unit is located as the enclosure and in which L and F are measured while operating only the affected activity, process, or emissions unit. All fans and blowers in the building or room shall be operated as they would under normal production. The capture efficiency equation to be used for this procedure is:

$CE = (L - F_B)/L$ where:

CE = capture efficiency, decimal fraction, times 100 (percentage)

L = mass of liquid VOC input to the activity, process, or emissions unit

F_B = mass of fugitive VOC that escapes from building enclosure

Procedure L is used to obtain L. Procedure F.2 is used to obtain F_B.

(3) Recordkeeping and Reporting.

- (a) The owner or operator of an affected activity, process, or emissions unit shall submit to the Department a list of the procedures that will be used for the capture efficiency tests at the owner or operators facility. A copy of the list shall be kept on file at the affected facility.
- (b) Required test reports shall be submitted to the Department within forty-five (45) days of the test date. A copy of the results shall be kept on file at the facility.
- (c) If any physical or operational change is made to a control system, the owner or operator of the affected facility shall notify the Department of the change within ten (10) working days after making such change. The Department may require the owner or operator of the affected activity, process, or emissions unit to conduct a new capture efficiency test if the Department has reason to believe (based on engineering calculations or empirical evidence) that a physical or operational change made to the capture system has decreased the overall emissions reduction efficiency of the system.
- (d) Notwithstanding the provisions of Rule, 62-297.340(1), F.A.C., the owner or operator of an affected activity, process, or emissions unit shall notify the Department thirty (30) days prior to performing any capture efficiency and/or control efficiency tests.
- (e) The owner or operator of an affected activity, process, or emissions unit using a Permanent Total Enclosure shall demonstrate that this enclosure meets the requirement given in Procedure T for a Permanent Total Enclosure during any required control device efficiency test.
- (f) The owner or operator of an affected activity, process, or emissions unit using a Temporary Total Enclosure shall demonstrate that this enclosure meets the requirements given in Procedure T for a Temporary Total Enclosure during any required control device efficiency test.

History: Formerly 17-2.700(7); Amended 6-29-93, Formerly 17-297.450, Amended 11-23-94, 1-1-96.
-----62-297.450

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62-297.620 Exceptions and Approval of Alternate Procedures and Requirements.

- (1) The owner or operator of any emissions unit subject to the provisions of this chapter may request in writing a determination by the Secretary or his/her designee that any requirement of this chapter (except for any continuous monitoring requirements) relating to emissions test procedures, methodology, equipment, or test facilities shall not apply to such emissions unit, and shall request approval of an alternate procedures or requirements.
- (2) The request shall set forth the following information, at a minimum:
 - (a) Specific emissions unit and permit number, if any, for which exception is requested.
 - (b) The specific provisions of this chapter from which an exception is sought.
 - (c) The basis for the exception, including but not limited to any hardship which would result from compliance with the provisions of this chapter.
 - (d) The alternate procedure(s) or requirement(s) for which approval is sought and a demonstration that such alternate procedure(s) or requirement(s) shall be adequate to demonstrate compliance with applicable emission limiting standards contained in the rules of the Department or any permit issued pursuant to those rules.
- (3) The Secretary or his/her designee shall specify by order each alternate procedure or requirement approved for an individual emissions unit in accordance with this section or shall issue an order denying the request for such approval. The Department's order shall be final agency action, reviewable in accordance with Section 120.57, Florida Statutes.
- (4) In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Secretary or the appropriate Director of District Management may waive any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for a particulate emissions unit equipped with a baghouse, and the substitution of the visible emissions standard, shall be specified in the permit issued to the emissions unit.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule.

History: Formerly 17-2.700(3); Amended 6-29-93; Formerly 17-297.620; Amended 11-23-94.

62-297.620

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